

## THE RELATIONSHIPS BETWEEN SMALL AND MEDIUM SCALE ENTERPRISE CHARACTERISTICS AND SALES VOLUME OF SELECTED SMALL AND MEDIUM SCALE ENTERPRISES IN OGUN STATE, NIGERIA

WAKEEL OLALEKAN MARADESA<sup>1\*</sup>, TOKUNBO OLUWASEUN OJO<sup>2</sup>

<sup>1</sup>Department of Business Education, Tai Solarin University of Education, Ijagun, Ogun State.

<sup>2</sup>Department of Business Education, Sikiru Adetona College of Education, Science and Technology, Omu-Ajose, Ogun State.

\*Corresponding author: [maradesawo@tasued.edu.ng](mailto:maradesawo@tasued.edu.ng)

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### Abstract

*The study examined the relationships between small and medium scale enterprise characteristics (for example, process innovation, product innovation and marketing innovation) and sales volume of selected small and medium scale enterprises (SMEs) in Ogun State, Nigeria. Three null hypotheses were formed and a quantitative correlational survey research design were adopted to achieve the purpose of the study. A simple random sampling method was employed to select 228 respondents for the study. The instrument for data collection comprised of a well-structured questionnaire. Linear regression was used to analyze hypotheses at a 0.05 level of significance. The findings revealed that there was a significant relationship between product innovation ( $r^2=0.915$ ,  $t=214.643$ ,  $p<0.05$ ), process innovation ( $r^2=0.924$ ,  $t=226.145$ ,  $p<0.05$ ) and marketing innovation ( $r^2=0.910$ ,  $t=241.400$ ,  $p<0.05$ ) and sales volume of selected SMEs in Ogun State. The authors concluded that product, process and marketing innovation significantly predicted the sales volume of selected SMEs in Ogun State. The authors further recommended, among others, that product, process and marketing innovation should be encouraged among SMEs in order to foster their sales volume and performance at all time.*

**Keywords:** Medium Scale Enterprise Characteristics, Marketing Innovation, Product Innovation, Process Innovation, Sales Volume, Small Scale Enterprise Characteristics.

### Introduction

The economic prosperity and survival of small and medium enterprises (SMEs) in Nigeria are experiencing turbulent hiccups in sales turnout. This precarious situation may be attributed to economic constraints and technological innovation setback. Despite the persistence of this precarious situation, SME are still seen as a strategic vehicle for economic development and employment generation (National Bureau of Statistics, 2019). The changing ecology of global and local competition, technologies, and managerial dexterity are fueling decline in sales. The inaction, non-adoption, lack of innovativeness and systemic deficiencies within SMEs further affected sales volume (Ariguzo, Agbawodikeizu & Egwakhe, 2018). Sales volume, according to Onyejiaku, Ghasi, and Okwor (2018) is the quantity by which the average sales of a company's products or services have grown, typically on a year-on-year basis. Sirajuddin, Muhammad and Muhammad (2017) opined that sales volume as a subjective performance measurement acts as a catalyst with which

performance information is provided in non-monetary terms. Kelemu and Mandefro (2017) pointed out that the purposes of sales volume are prominent in many firms, arguing that the business performance and economic profit of the firm can be summarized in sales volume.

The concept of small and medium scale enterprises has been defined differently, as different individuals, nations and groups defined it to suit their own systems and purposes (Boniface & Israel, 2015). Boniface and Israel (2015) defined small and medium scale businesses from the stand point of its relevance in the development of any economy. The Nigerian companies and Allied Matters Act (CAMA,1990) Section 376 gave a blue print for the characterization and possible definition of small and medium scale companies which are that, an SME is an indigenous private company that is limited by share and business turnovers for the year, whose net assets value is not more than 1 million naira, and whose directors hold not less than 50% of its equity share capital (CAMA, 1990). According to the Organization for Economic Co-operation and Development (OECD), the characteristics of SMEs not only reflect the economic pattern of a country, but also the social and cultural dimensions. Abiodun and Harry (2015) reported that these differing patterns are reflected within different definitions and criteria for SMEs adopted by different countries, whereas some refer to the number of employees as their distinctive criteria, while others used invested capital, and yet some use a combination of the number of employees, invested capital, sales and industry.

Ateke and Nwape (2017) argued that SMEs contribute significantly to national and regional development and are fundamental components of the economic fabric of economies, playing vital roles in stimulating economic growth, promoting innovation enhancing prosperity, generating employment, increasing national output, promoting export and fostering entrepreneurship. In order to compete and survive, retail SMEs must not only be in business to enjoy short-term profit maximization. Instead, they must design business strategies, and evaluate how such strategies (for example, strategic management and planning) eventually reflect in their marketing performance (Walker & Webster, 2014). Consequently, with the increasing global competition, SMEs turn to improve the business performance continuously and gain sustainable competitive advantage, particularly through innovation. Today, individuals and leading SMEs seek to benefit from the innovation and entrepreneurial activities as their priorities in order to gain competitive advantage (Gundy, Luzov, Kilic & Alpkan, 2011). In fact, the rapidly changing needs and demands of customers, short life cycle of products/services, instability of competitive advantage and any new global competition are among the main reasons that led to increasing importance of the question among leading organizations. This may account for why Johannessen and Olsen (2010) earlier raised a question, which many organizations have provided answers to: How do enterprising individuals innovate and how do they acquire the resources required to experience sustainable and competitive advantage?

Oirere (2015) opined that innovation leads to an increase in income and sales volume, acquisition of new equipment and machines, positive influence in income-generation business stability, and increase in competitive advantage. It is worthy of note that with the increase in competition across the globe, it becomes difficult for the organization to sustain itself. With the exponential increase in technological development and innovation consumer's needs and demands are changing dramatically and to deal with the sudden changes in the consumer's need and demands, the organization needs to develop new products and services based on consumer needs and demands (Gomezelj, 2016; Nieves & Segarra-Ciprés, 2015).

### **Statement of the Problem**

Small and medium-scale enterprises continually play vital roles on the development of economies, particularly in developing nations such as Nigeria. This notably reflected in their

contributions to employment generation, enhancements in living standards and utilization of local resources, among others. Innovation stands out as a crucial tool that continually enhances the sustainability of SMEs by fostering the creation of novel products and services, thereby ensuring customer loyalty. The primary reason behind the drive for innovation lies in firms' aspirations for heightened business performance and competitive advantage. Nonetheless, eventually all SMEs in Nigeria appear to lack innovativeness, which in turn detrimentally impacted their long-term viability. Despite the substantial positive roles played by SMEs in the economy, sustainability (that is, perpetual succession) emerge as one of their foremost challenges, with many nascent SMEs collapse shortly after establishment. Various hurdles confront SMEs including dwindling adoption of sustainability practices due to minimal external pressure from stakeholders, deficient corporate governance, managerial inadequacies among owners and managers, inadequate training and development initiatives, limited research and development, absence of product differentiation, decreased customer satisfaction, deficient succession planning, ineffective business partnerships, and inadequate organizational structures. Nigeria's industrial landscape continues to demonstrate insufficient linkages across different firm categories, particularly within SMEs, where innovation is expected predominantly occur barriers to innovation for SMEs encompass insufficient capital investment, organizational inertia, deficiencies in educational and training systems, cumbersome regulations, and ineffectiveness in acquiring requisite know-how and skills. Additional constraints include managerial deficiencies, a dearth of process and innovation, and challenges in effective utilization of technological innovations, which in turn could result in diminished productivity or unsustainable operations. It is based on these backdrops that the authors decided to provide empirical data on the interplay between SMEs characteristics and sales volume in selected SMEs in Ogun State

### **Purpose of the study**

The purpose of this study was to examine the relationships between small and medium enterprise characteristics (for example, process innovation, product innovation and marketing innovation) and sales volume of selected SMEs in Ogun state, Nigeria. Specifically, the study seeks to examine:

1. the relationship between product innovation and sales volume of selected SMEs in Ogun state.
2. the relationship between process innovation and sales volume of selected SMEs in Ogun state.
3. the relationship between marketing innovation and sales volume of selected SMEs in Ogun state.

### **Hypotheses**

The following null hypotheses were formed and tested at a 0.05 level of significant:

**Research Hypothesis 1:** There is no significant relationship between product innovation and sales volume of selected SMEs in Ogun State.

**Research Hypothesis 2:** There is no significant relationship between process innovation and sales volume of selected SMEs in Ogun State

**Research Hypothesis 3:** There is no significant relationship between marketing innovation and sales volume of selected SMEs in Ogun State.

## **Methods**

### **Research Design**

The study employed a quantitative correlational survey research design. This design help to determine the extent to which the predictor variable(s) (that is, process innovation, product innovation and marketing innovation) influence the outcome variable (that is, sales volume) as in this present study.

### **Participants and Sampling Procedure**

The participants comprised 532 respondents (All selected SMEs in Ogun State). The sample size of our study however, was arrived through Yaro Yamane sample size formula. A total of two hundred and twenty-eight (228) respondents were selected as the sample size for the study and simple random sampling techniques was adopted.

### **Data Collection Instrument**

The data was collected using self-structured questionnaire tagged: Small and Medium Enterprise Characteristics and Sales Volume Questionnaire (SMECSVQ). The responses of the items were based on 4 likert scales ranging from Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree.

### **Instrument Validity and Reliability**

The instrument was validated by experts in the field of Business of Education and in Evaluation Department of Tai Solarin University of Education, Ijagun, Ogun State. The reliability co-efficient of the instrument was 0.78.

### **Procedure for Data Collection**

A letter of introduction was given to the participants stating the purpose of the data collection and the distributed questionnaires were retrieved back from the respondents immediately after the completion. The exercise was carried out within four (4) weeks. No form of incentives was offered to the respondents.

### **Data Analysis**

The research hypotheses were analyzed using linear regression statistic and were tested at a 0.05 level of significance.

## **Results**

*Research Hypothesis 1:* There is no significant relationship between product innovation and sales volume of selected SMEs in Ogun State.

**Table 1: Model Summary of linear regression on the relationship between product innovation and sales volume.**

Model	R	R-Square	Adjusted R-Square	Standardized Error of Estimate	Durbin Watson
1.	.973	.947	.915	.478	.031

To test the hypothesis 1, linear regression was used to regress the independent variable against the dependent variable to make our prediction. Table 1 indicates the model summary of the simple regression equation that predicted sales volume. The explanation of the values is presented in Table 2.

**Table 2: Coefficients of linear regression on the relationship between product innovation and sales volume.**

Model	Unstandardized Coefficient		Standardized Coefficient		
	$\beta$	Std Error	Beta	t-value	p-value
I Constant	1.701	.079		25.003	.000
Product Innovation	.671	.004	.813	214.643	.000

Table 2 summarized the test of hypothesis 1. The value of the intercept ( $\beta_0$ ) indicates that the value of sales volume, when all the explanatory variables are zero is 1.701. Specifically, one percent change (improvement) in product innovation leads to 67.1% increase in sales volume. By and large, the authors rejected the null hypothesis, and rather accept the alternate hypothesis that product innovation significantly associate with sales volume of the SMEs in Ogun State.

*Research Hypothesis 2:* There is no significant relationship between process innovation and sales volume of selected SMEs in Ogun State.

**Table 3: Model Summary of linear regression on the relationship between process innovation and sales volume.**

Model	R	R-Square	Adjusted R-Square	Standardized Error of Estimate	Durbin Watson
1	.973	.947	.924	.478	.038

To test the hypothesis 2, linear regression was used to regress the independent variable against the dependent variable to make our prediction. Table 3 indicates the model summary of the simple regression equation that predicted sales volume. The explanation of the values is presented in Table 4.

**Table 4: Coefficients of linear regression on the relationship between process innovation and sales volume.**

Model	Unstandardized Coefficient		Standardized Coefficient		
	$\beta$	Std Error	Beta	t-value	p-value
I Constant	1.687	.087		26.001	.000
Process Innovation	.675	.004	.833	226.145	.000

The model summary (Table 4) provides useful information about the regression analysis of the second hypothesis. The value of the intercept ( $\beta_0$ ) in Table 4 indicates that the value of sales volume when all the explanatory variable is zero is 1.687. Specifically, one percent increase in the rate of improvement in process innovation increases sales volume at 67.5%. Hence process innovation has positive significant influence on sales volume of the selected SMEs. However, we reject the null ( $H_{02}$ ) hypothesis that process innovation has no significant influence on the sales volume of the selected SMEs in the Ogun State.

*Research Hypotheses 3:* There is no significant relationship between marketing innovation and sales volumes of selected SMEs in Ogun State.

**Table 5: Model Summary of linear regression on the relationship between marketing innovation and sales volume.**

Model	R	R-Square	Adjusted R-Square	Standardized Error of Estimate	Durbin Watson
1	.938	.938	.910	.454	.030

To test the hypothesis 3, linear regression was used to regress the independent variable against the dependent variable to make our prediction. Table 5 indicates the model summary of the simple regression equation that predicted sales volume. The explanation of the values is presented in Table 6.

**Table 6: Coefficients of linear regression on the relationship between marketing innovation and sales volume.**

Model	Unstandardized Coefficient		Standardized Coefficient		
	$\beta$	Std Error	Beta	t-value	p-value
I Constant	1.862	.080		24.001	.000
Marketing Innovation	.785	0.050	.869	241.400	.001

The model summary table (Table 6) provides useful information about the regression analysis for the third hypothesis. The value of the intercept ( $\beta_0$ ) indicates that the value of sales volume when all the explanatory variables are zero is 1.862. Specifically, one percent change

(improvement) in marketing innovation increases the rate of market share by 78.5%. Hence, we reject the null hypothesis that and accept the implied alternative hypothesis that marketing innovation has significant influence on sales volume of the selected SMEs in Ogun State.

### **Discussion**

This study examined the relationship between small and medium enterprises innovation and sales volume of selected SMEs in Ogun State. In general, three hypotheses were developed and their results are discussed as follows: hypothesis 1 examined the relationship between product innovation and sales volume of selected SMEs in Ogun State. The result showed that there is evidence that product innovation has a positive relationship with sales volume. The results of this findings supported that successful product innovation often leads to increased sales volume. When a company introduces innovative products that offer unique features, improved functionality or better value to customers, it can attract new customers and retain existing ones. Innovative products can generate excitement and demand in the market, resulting in higher sales. This study shows results consistent with other studies, such as that conducted by Adewale (2021), which examined effect of innovation on small and medium enterprises performance in Abuja Municipal area council of FCT-Abuja.

Hypothesis 2 examined the relationship between process innovation and sales volume. The result showed that there is evidence that process innovation has a positive relationship with sales volume. The results of this study indicated that process innovation often leads to cost savings and increased operational efficiency. By optimizing production process, streamlining workflows, or adopting new technologies, SMEs can reduce production cost, minimize waste and improve resource utilization. These cost savings can be passed on to customers through lower prices or higher profit margin, which can stimulate sales volume by making the product more attractive to customers. The results of this study supported the study conducted by Matthew and Micah (2023), which examined the effect of innovation strategy on the performance of small and medium enterprises in Kaduna State, Nigeria.

Hypothesis 3 examined the relationship between marketing innovation and sales volume. The result showed that there is evidence that marketing innovation has a positive relationship on sales volume. The results of this study indicated that marketing innovation improves customer engagement and interaction. Therefore, by utilizing innovative marketing approaches such interactive content, personalized messaging, or immersive experiences, SMEs can capture the attention and interest of customers in more meaningful ways. Thus, engaged customers are more likely to develop a connection with the brand, consider purchasing its products and services and ultimately contribute to increased sales volume. The results of this study supported the study conducted by Mohamed, Abdikarim and Muhumed (2017), which examined the impact of innovation on small and medium enterprises performance.

### **Conclusion**

The objective of this study is to examine the influence of small and medium enterprises innovation on sales volume of selected SMEs in Ogun State, Nigeria. The study showed that product, process and marketing innovation have a positive influence on sales volume. Innovation is thus important for SMEs firms to remain competitive for business growth and performance. The ability of SMEs to better perform and obtain growth within a determined time period can be established by its innovative capabilities and therefore, SMEs should continue to device innovative strategies that can improve their sales volume and thus performance overtime.

## Recommendation

The following recommendations are made:

1. Small and medium scale enterprises should endeavour to introduce new and innovative features, functionalities or designs. This uniqueness can attract customers who are seeking something fresh and exciting, giving them a competitive edge and increasing the likelihood of making sales.
2. Small and medium scale enterprises should endeavour to focus on improving quality control measures, ensuring consistent and higher quality products. When customers perceive products as reliable, durable and superior in quality, it enhances their satisfaction and trust in the brand.
3. Small and medium scale enterprises should endeavour to enhance their brand awareness and identify specific customer segments effectively. By leveraging advanced data analytics, SMEs can gather valuable insights about their target audience's preferences, behavior and needs. This enables the development of targeted marketing campaigns that resonate with customers, leading to increased sales volume.

## References

- Abiodun, A. E., & Harry, E. (2015). Small and medium scale enterprises in Nigeria: Competitive advantage and its impacts. *International Journal of Research Studies in Management*, 3(2), 76-78.
- Adewale, E.A. (2021). Effect of innovation on small and medium enterprises performance in Abuja Municipal Area Council of FCT, Abuja. *Fulafia Journal of Entrepreneurial Development*, 1(1).
- Ariguzo, V. A., Aigbawodikeizu, J., & Egwakhe, A. J. (2018). The relationship between innovation adoption predictors and market share of selected SMEs in Ogun State. *UMYUK Journal of Economics and Development*, 1(2) 1-16.
- Ateke, B. W., & Nwiese, N. M. (2017). Agile supply chain management practices and competitiveness of SMEs: A conceptualization. *International Journal of Social Sciences and Management Research*, 3(7), 1-10.
- Boniface, M. O., & Israel, E. (2015). Entrepreneurship development in small and medium scale enterprise: A Youth and Women Empowerment Strategy. Jumak Publishers.
- Gomezelj, D. O. (2016). A systematic review of research on innovation in hospitality and tourism. *International Journal of Contemporary Hospitality Management*.
- Gunday, G., Ulusoy, G., Kilic, K. & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662-676.
- Johannessen, J. & Olsen, B. (2010). The future of value creation and innovations: Aspects of a theory of value creation and innovation in a global knowledge economy. *International Journal of Information Management*, 30(6), 502-511.
- Kelemu, N., & Mandefro, G. (2017). The role of marketing strategy for sales volume: A case study on Ethiopian Textile Firms, Ethiopia. *Journal of Marketing and Consumer Research*, 40 1-10.
- Masood, U. H., Sadia, S., Muhammad, S.N., & Saman, N. (2013). Effects of innovation types on firm performance: An empirical study on Pakistan's Manufacturing Sector. *Pakistan Journal of Commerce and Social Sciences*, 1, 243-262.
- Matthew, A.O. & Micha, A.G. (2023). Effect of innovation strategy on the performance of small and medium enterprises in kaduna state, NIGERIA. *EPRA International Journal of Economic and Business Review-Peer Reviewed Journal*, Vol 11 (6), e-ISSN: 2347 - 9671| p- ISSN: 2349 – 018



- Mohamed H. A, Abdikarim A., H. & Muhumed M. M. (2017). The impact of innovation on small and medium enterprises performance: Empirical evidence from Hargeisa, Somaliland. *International Journal of Academic Research in Business and Social Sciences*, 7(8), 14-28.
- National Bureau of Statistics (NBS) (2019). Report. Retrieved from <https://www.theelephant.info/documents/kenya-national-bureau-of-statistics-economic-survey-2019>.
- Nieto, M. J., & Santamaría, L. (2007). The importance of diverse collaborative networks for the novelty of product innovation. *Technovation*, 27(6–7), 367–377.
- Nieves, J., & Segarra-Ciprés, M. (2015). Management innovation in the hotel industry. *Tourism Management*, 46, 51–58.
- OECD (2005). Oslo manual: Proposed guidelines for collecting and interpreting technological innovation data. Paris: Organization for Economic Cooperation and Development.
- Oirere, A., N. (2015). Effect of innovation on financial performance of small and medium manufacturing enterprises in Nairobi County. A research project submitted in partial fulfilment of the requirements for the award of master of business administration (Mba) school of business, university of Nairobi.
- Onyejiaku, C. C., Ghasi, N. C., & Okwor, H. (2018). Does Promotional Strategy Affect Sales Growth of Manufacturing Firms in South East Nigeria? *European Journal of Management and Marketing Studies*, 3(1), 43-60.
- Sirajuddin, O., Muhammad, R., & Muhammad, J. (2017). The effect of strategic management practices on SME performances in Makassar, Indonesia. *American Journal of Theoretical and Applied Business*, 3(4), 71-80.
- SMEDAN (2012). *Small and medium enterprises performance in Nigeria*. African Entrepreneurship Seminar. University of Essex Scientific Committee on Entrepreneurship
- Walker, O., & Webster, W. (2014). *Strategic entrepreneurship: An integrated approach for emerging firms' performance analysis*. Pearson Education.